LISTING OF CLAIMS

Please replace all previous versions, and listings, of claims in the present application with the following listing of claims.

1. (Currently Amended) A semiconductor device ~~electrically and mechanically connectable to an external circuit~~, comprising:

a circuit substrate;

a conductive substrate;

an insulation film disposed on said conductive substrate;

a semiconductor substrate including ~~a fixed portion,~~ a movable portion~~, and connecting members on a plane, said semiconductor substrate having gaps between said fixed portion and said movable portion, said connecting members elastically connecting said movable portion to said fixed portion across said gaps, said movable portion being movable~~ that may be vibrated in a first ~~predetermined~~ direction~~, with respect to said fixed portion, said fixed portion being electrically insulated from said movable portion and comprising:~~

an input electrode disposed on said insulation film so as to face said movable portion through an open space, receiving ~~for inputting~~ a ~~periodical~~ periodic signal from said ~~external~~ circuit substrate, and causing ~~to~~ said movable portion to vibrate ~~said movable portion~~ in said first direction, a first stray capacitor of a first capacitance being induced in said insulating film between said input electrode and said conductive substrate;

an output electrode disposed on said insulation film so as to face said movable portion through an open space, and ~~for~~ outputting a vibration signal ~~indicative of capacitive variation based on~~ indicating vibration of said movable portion in said first ~~predetermined~~ direction ~~with respect to said output electrode~~, a second stray capacitor of a second capacitance being induced in said insulating film

between said output electrode and said conductive substrate, a noise derived from the periodical signal being added to the vibration signal based on the first and second stray capacitors; ~~and~~

~~a shield substrate arranged at peripheries of said movable portion, said input electrode, and said output electrode;~~

~~an input wire for connecting said input electrode to said external circuit to supply said periodical signal to said input electrode;~~

~~an output wire connected to said output electrode and being connectable to said external circuit;~~

~~a shield wire connectable to a constant potential at said external circuit to provide capacitive shielding between said input wire and said output wire; and~~

~~a pad connected to said shield wire on said shield substrate at a location between said input electrode and said output electrode to place said shield wire between said input wire and output wire having electrical insulation to shield said output wire from said periodical signal on said input wire with a predetermined positional relation therebetween when said semiconductor device is electrically and mechanically connected to said external circuit, and to supply said constant potential to said shield substrate to shield said output electrode from said periodical signal on said input electrode when said semiconductor device is electrically and mechanically connected to said external circuit,~~

~~wherein said shield frame, said input electrode, and said output electrode are coplanar~~

a dummy electrode disposed on said insulation film so as to induce a third stray capacitor of a third capacitance in said insulating film between said dummy electrode and said conductive substrate in a manner that the third capacitance is substantially equal to the second capacitance induced by the output electrode, a dummy signal being generated in said dummy electrode from the periodical signal received in said input electrode based on the first and third stray capacitors; and

a noise reducer which reduces the noise of the vibration signal by using the dummy signal of said dummy electrode.

2. (Original) The semiconductor device as claimed in claim 1, wherein a top surface of said semiconductor substrate has a rectangular shape, and said input electrode and said output electrode are arranged at locations corresponding to different sides of said rectangular shape, respectively.

3. (Currently Amended) The semiconductor device as claimed in claim ~~1~~ 41, wherein said shield wire is grounded at said circuit substrate.

4. (Currently Amended) The semiconductor device as claimed in claim ~~1~~ 41, wherein said shield wire is arranged adjacent to either of said input electrode or said output electrode.

5.(Cancelled)

6. (Currently Amended) The semiconductor device as claimed in claim 1, wherein said movable portion is movable in ~~another~~ a second ~~predetermined~~ direction ~~with respect to said fixed portion~~ perpendicular to said first direction, said semiconductor device further comprising angular velocity detection means for detecting vibration of said movable portion in said ~~another~~ second direction to determine an angular velocity around an axis perpendicular to said first ~~predetermined~~ direction and ~~another~~ second ~~predetermined~~ direction to generate said detection signal.

7. (Currently Amended) A semiconductor device ~~electrically and mechanically connectable to an external circuit~~, comprising:

a circuit substrate;

a conductive substrate;

an insulation film disposed on said conductive substrate;

a semiconductor substrate including ~~a fixed portion,~~ a movable portion ~~, and connecting members, on a plane, said semiconductor substrate having gaps between said fixed portion and said movable portion, said connecting members elastically connecting said movable portion to said fixed portion across said gaps, said movable portion being movable~~ capable of vibrating in a first ~~predetermined~~ direction and vibrating in a second direction perpendicular to the first direction when an angular velocity around a third direction perpendicular to the first and second directions is applied to the movable portion; ~~with respect to said fixed portion, said fixed portion being electrically insulated from said movable portion and comprising:~~

~~an input~~ a drive electrode disposed on said insulation film so as to face said movable portion through an open space, ~~for inputting~~ receiving a ~~periodical~~ periodic signal from said ~~external~~ circuit substrate, and causing ~~to~~ said movable portion to vibrate ~~said movable portion~~ in the first direction, a first stray capacitor of a first capacitance being induced in said insulating film between said drive electrode and said conductive substrate;

~~an output~~ a detection electrode which is disposed on said insulation film so as to face said movable portion through an open space, ~~for outputting~~ and generates a detection signal ~~indicative of capacitive variation based on~~ indicating vibration of said movable portion in said ~~predetermined~~ second direction ~~with respect to said output electrode~~, a second stray capacitor of a second capacitance being induced in said insulating film between said detection electrode and

said conductive substrate, a noise derived from the periodic signal being added to the detection signal based on the first and second stray capacitors;

a monitor electrode ~~for monitoring~~ which is disposed on said insulation film so as to face said movable portion through an open space, and generates a monitor signal indicating ~~capacitive variation based on~~ vibration of said movable portion in said first ~~predetermined~~ direction, ~~with respect to said monitor electrode and supplying a monitor signal to said external circuit~~ a third stray capacitor of the second capacitance being induced in said insulating film between said monitor electrode and said conductive substrate, a noise derived from the periodic signal being added to the monitor signal based on the first and third stray capacitors; ~~and~~

~~a shield substrate arranged at peripheries of said movable portion, said input electrode, said output electrode, and said monitor electrode;~~

~~an input wire connected to said input electrode and being connectable to said external circuit to supply said periodical signal to said input electrode;~~

~~an output wire connected to said output electrode and being connectable to said external circuit;~~

~~a monitor wire connected to said monitor electrode and being connectable to said external circuit;~~

~~a shield wire connectable to a constant potential at said external circuit to provide capacitive shielding between said input wire and said output wire and between said input wire and said monitor wire; and~~

~~a pad connected to said shield wire on said fixed portion at a location between said input electrode and said output electrode to place said shield wire between said input wire and output wire and between said input wire and said monitor wire having electrical insulation to shield said output wire and said monitor wire from said periodical signal on said input wire with a predetermined~~

~~positional relation therebetween when said semiconductor device is electrically and mechanically connected to said external circuit and to supply said constant potential to shield substrate to shield said output electrode and said monitor electrode from said periodical signal on said input electrode when said semiconductor device is electrically and mechanically connected to said external circuit,~~

~~wherein said shield frame, said input electrode, and said output electrode are coplanar~~

a dummy electrode disposed on said insulation film so as to induce a fourth stray capacitor of a third capacitance in said insulating film between said dummy electrode and said conductive substrate in a manner that the third capacitance is substantially equal to the second capacitance, a dummy signal being generated in said dummy electrode from the periodic signal received in said input electrode based on the first and fourth stray capacitors; and

a noise reducer which reduces the noise of the detection signal or the monitor signal by using the dummy signal of said dummy electrode.

8. (Currently Amended) The semiconductor device as claimed in claim 7, wherein said semiconductor ~~plate~~ substrate is a rectangular plate, and said ~~input~~ drive electrode and a group of said ~~output electrode~~ detection and monitor electrodes are arranged at locations corresponding to different sides of said rectangular plate, respectively.

9. (Currently Amended) The semiconductor device as claimed in claim ~~7~~ 42, wherein said shield wire is grounded at said circuit substrate.

10. (Currently Amended) The semiconductor device as claimed in claim ~~7~~ 42, wherein said shield wire is arranged adjacent to either of said ~~input~~ drive wire or said output wire.

11. (Currently Amended) The semiconductor device as claimed in claim ~~7~~ 42, wherein said shield wire is arranged adjacent to either of said ~~input~~ drive wire or said monitor wire.

12. (Cancelled)

13. (Currently Amended) A semiconductor device electrically and mechanically connectable to an external circuit, comprising:

a semiconductor substrate including, on a plane, a fixed portion and a movable portion, said fixed portion comprising a ~~shield substrate~~ frame, and elastically supporting means connected to a supporting substrate for supporting said movable portion to allow said movable portion to move in a predetermined direction with respect to said fixed portion, said movable portion being electrically connected to a predetermined potential;

capacitive driving means for driving said movable portion, said capacitive driving means including a drive electrode included in said fixed portion for receiving a drive signal from an said external circuit to provide a drive force to said movable portion to vibrate said movable portion;

detection means for detecting capacitive variation based on vibration of said movable portion caused by supplying said drive signal to said drive electrode, said detection means including a detection electrode included in said fixed portion to supply a detection signal indicative of said capacitive variation to said external circuit;

a shield wire pad arranged between said drive electrode and said detection electrode neighboring said drive electrode;

a drive signal wire connected to said drive electrode and being connectable to said external circuit to supply said drive signal to said drive electrode;

a detection wire connected to said detection electrode and being connectable to said external circuit; and

a shield wire connected to said shield wire pad and connectable to a constant potential at said external circuit, wherein said shield wire provides capacitive shielding between said drive signal wire and said detection wire to shield said detection wire from said drive signal on said drive signal wire when said semiconductor device is electrically and mechanically connected to said external circuit, the shield wire pad being located between the detection electrode and the drive signal electrode, the shield wire operating ~~with a predetermined positional relation therebetween and~~ to supply said constant potential to said ~~shield substrate~~ frame to further shield said detection electrode and said detection wire from said drive signal on said drive signal wire when said semiconductor device is electrically and mechanically connected to said external circuit,

wherein said ~~shield substrate~~ frame, said drive electrode, and said detection electrode are coplanar.

14. (Previously Presented) The semiconductor device as claimed in claim 1, wherein said pad is arranged on said fixed portion to have predetermined distances to said input electrode and said output electrode to provide spatial distances for said capacitive shielding between said input wire and said output wire by said shield wire connected to said pad.

15. (Previously Presented) The semiconductor device as claimed in claim 7, wherein said pad is arranged on said fixed portion to have predetermined distances to said input electrode and said output electrode to provide spatial distances for said capacitive shielding between said input wire and said output wire by said shield wire connected to said pad.

16. (Previously Presented) The semiconductor device as claimed in claim 13, wherein said shield wire pad is arranged on said fixed portion to have predetermined distances to said drive electrode and said detection electrode to provide spatial distances for said capacitive shielding between said drive signal wire and said detection wire by said shield wire connected to said shield wire pad.

17. (Currently Amended) A semiconductor device electrically and mechanically connectable to an external circuit, comprising:

a semiconductor substrate including a fixed portion, a movable portion, and connecting members, said semiconductor substrate including gaps between said fixed portion and said movable portion, said connecting members elastically connecting said movable portion to said fixed portion across said gaps, said fixed portion being coplanar with said movable portion across said gaps and said connecting members throughout said gaps and said connecting members, said movable portion being movable in predetermined first and second directions with respect to said fixed portion, said fixed portion having electrical insulation from said movable portion and including:

an input electrode for receiving ~~inputting~~ a ~~periodical~~ periodic signal from said external circuit, and for causing ~~to~~ said movable portion to vibrate ~~said movable portion~~;

an output electrode for outputting a signal indicative of capacitive variation based on vibration of said movable portion in said predetermined direction toward said external circuit substrate; and

an input wire connected to said input electrode and being connectable to said external circuit to supply said ~~periodical~~ periodic signal to said input electrode;

an output wire connected to said output electrode and being connectable to said external circuit;

a shield wire connectable to a constant potential at said external circuit to provide capacitive shielding between said input wire and said output wire; and

a pad connected to said shield wire on said fixed portion at a location between said input electrode and said output electrode to place said shield wire between said input wire and output wire, the pad having electrical insulation to shield said output wire from said ~~periodical~~ periodic signal provided on said input wire when said semiconductor device is electrically and mechanically connected to said external circuit, ~~with a predetermined positional relation therebetween and~~ the pad operating to supply said constant potential to said ~~shield substrate~~ frame to shield said output electrode from said ~~periodical~~ periodic signal provided on said input electrode when said semiconductor device is electrically and mechanically connected to said external circuit,

wherein said ~~shield substrate~~ frame, said input electrode, and said output electrode are coplanar.

18. (Previously Presented) The semiconductor device as claimed in claim 17, wherein said connecting members includes driving beams allowing said movable portion to move in said first predetermined direction and detection beams allowing said movable portion to move in said second predetermined direction, and said driving beams and said detection beams are independently arranged.

19. (Previously Presented) The semiconductor device as claimed in claim 18, wherein said driving beams and said detection beams have different shapes, said driving beams each having a U-shape and said detection beams each having a straight bar shape.

20. (Currently Amended) A semiconductor device electrically and mechanically connectable to an external circuit, comprising:

a semiconductor substrate including, on a plane, a fixed portion and a movable portion, said fixed portion comprising a ~~shield substrate~~ frame and supporting means connected to said ~~shield substrate~~ frame for supporting said movable portion with movement in a predetermined direction with respect to said fixed portion, said movable portion being electrically connected to a predetermined potential;

capacitive driving means for driving said movable portion, said capacitive driving means including a drive electrode included in said fixed portion for receiving a drive signal from said external circuit to provide a drive force to said movable portion to vibrate said movable portion;

detection means including a detection electrode for detecting capacitive variation with respect to said detection electrode based on vibration of said movable portion caused by supplying said drive signal to said drive electrode, said detection means including a detection electrode included in said fixed portion to output a detection signal indicative of said capacitive variation;

a shield wire pad arranged between said drive electrode and said detection electrode that is adjacent to said drive electrode;

a drive signal wire connected to said drive electrode and being connectable to said external circuit to supply said drive signal to said drive signal electrode;

a detection wire connected to said detection electrode and being connectable to said external circuit, said ~~shield substrate~~ frame being arranged at peripheries of said moving portion, said drive electrode, and said detection electrode; and

a shield wire connected to said shield wire pad and being connectable to a constant potential at said external circuit, wherein said shield wire provides capacitive shielding between said drive signal wire and said detection wire in order to shield said detection wire from said drive signal, which is provided on said drive signal wire when said semiconductor device is electrically and mechanically connected to said external circuit, the shield pad being located between the drive electrode and the

detection electrode, ~~with a predetermined positional relation therebetween~~ and the shield wire operating to supply said constant potential to said ~~shield substrate~~ frame in order to shield said detection electrode from said drive signal, which is provided on said drive signal electrode,

wherein said ~~shield substrate~~ frame, said drive electrode, and said detection electrode are coplanar.

21. (Previously Presented) The semiconductor device as claimed in claim 20, wherein said connecting members includes driving beams allowing said movable portion to move in said first predetermined direction and detection beams allowing said movable portion to move in said second predetermined direction, and said driving beams and said detection beams are independently arranged.

22. (Previously Presented) The semiconductor device as claimed in claim 20, wherein said driving beams and said detection beams have different shapes, said driving beams each having a U-shape and said detection beams each having a straight bar shape.

23. (Currently Amended) A semiconductor device electrically and mechanically connectable to an external circuit, comprising:

a semiconductor substrate including, ~~on~~ in a plane, a fixed portion and a movable portion, said fixed portion comprising a ~~shield substrate~~ frame and elastically supporting means connected to said ~~shield substrate~~ frame for supporting said movable portion to allow movement in a predetermined direction with respect to said fixed portion, said movable portion being electrically connectable to a predetermined potential;

capacitive driving means for driving said movable portion, said capacitive driving means including a drive electrode included in said fixed portion for receiving a drive signal from said external circuit to provide a drive force to said movable portion to vibrate said movable portion;

detection means for detecting capacitive variation based on vibration of said movable portion caused by supplying said drive signal to said drive electrode, said detection means including a detection electrode included in said fixed portion to output a detection signal;

a shield wire pad arranged between said drive electrode and said detection electrode neighboring said drive electrode;

a drive signal wire connected to said drive electrode and being connectable to said external circuit to supply said drive signal to said drive signal electrode;

a detection wire connected to said detection electrode and being connectable to said external circuit, said ~~shield substrate~~ frame being arranged at peripheries of said moving portion, said drive electrode, and said detection electrode; and

a shield wire connected to said shield wire pad and being connectable to a constant potential at said external circuit, wherein said shield wire provides capacitive shielding between said drive signal wire and said detection wire to shield said detection wire from said drive signal on said drive signal wire with a predetermined positional relation therebetween when said semiconductor device is electrically and mechanically connected to said external circuit and to supply said constant potential to said ~~shield substrate~~ frame to shield said detection electrode from said drive signal on said drive signal electrode,

wherein said ~~shield substrate~~ frame, said drive electrode, and said detection electrode are coplanar.

24. (Previously Presented) The semiconductor device as claimed in claim 23, wherein said supporting means includes driving beams allowing said movable portion to move in said predetermined direction and detection beams allowing said movable portion to move in another predetermined direction, and said driving beams and said detection beams are independently arranged.

25. (Previously Presented) The semiconductor device as claimed in claim 23, wherein said driving beams and said detection beams have different shapes, said driving beams each having a U-shape and said detection beams each having a straight bar shape.

26. (Previously Presented) The semiconductor device as claimed in claim 1, wherein said movable portion comprises an electrode facing said output electrode to provide a capacitance providing said capacitive variation when said movable portion vibrates in said predetermined direction.

27. (Previously Presented) The semiconductor device as claimed in claim 7, wherein said movable portion comprises an electrode facing said output electrode to provide a capacitance providing said capacitive variation when said movable portion vibrates in said predetermined direction.

28. (Previously Presented) The semiconductor device as claimed in claim 13, wherein said movable portion comprises an electrode having said predetermined potential supplied from said movable portion and facing said detection electrode to provide a capacitance providing said capacitive variation when said movable portion vibrates in said predetermined direction.

29. (Currently Amended) The semiconductor device as claimed in claim 17, wherein said movable portion is electrically connected to a predetermined potential and comprises an electrode

having said predetermined potential supplied from said movable portion and facing said output electrode to provide a capacitance providing said capacitive variation when said movable portion vibrates in said first predetermined direction.

30. (Currently Amended) The semiconductor device as claimed in claim 20, wherein said movable portion comprises an electrode having said predetermined potential supplied from said movable portion and facing said detection electrode to provide a capacitance providing said capacitive variation when said movable portion vibrates in said predetermined direction.

31. (Currently Amended) The semiconductor device as claimed in claim 23, wherein said movable portion includes an electrode having said predetermined potential supplied from said movable portion and facing said detection electrode to provide a capacitance providing said capacitive variation when said movable portion vibrates in said predetermined direction.

32.(Currently Amended) A semiconductor device comprising:

a circuit substrate and a semiconductor substrate fixed with respect to said circuit substrate, said semiconductor substrate including a fixed portion, a movable portion, and connecting members, ~~on~~ in a plane, said semiconductor substrate having gaps between said fixed portion and said movable portion, said connecting members elastically connecting said movable portion to said fixed portion across said gaps, said movable portion being movable in a predetermined direction with respect to said fixed portion, said fixed portion including electrical insulation from said movable portion and comprising:

an input electrode for inputting a ~~periodical~~ periodic signal from said circuit substrate to said movable portion to vibrate said movable portion;

an output electrode for outputting a signal indicative of capacitive variation based on vibration of said movable portion in said predetermined direction with respect to said output electrode; and

a ~~shield substrate~~ frame arranged at peripheries of said movable portion, said input electrode, and said output electrode with electrical insulation;

an input wire for connecting said input electrode to said circuit substrate to supply said ~~periodical~~ periodic signal to said input electrode;

an output wire for connecting said output electrode to said circuit substrate;

a shield wire connected to a constant potential at said circuit substrate to provide capacitive shielding between said input wire and said output wire; and

a shield pad connected to said shield wire on said fixed portion at a location between said input electrode and said output electrode, the shield pad operating to place said shield wire between said input wire and output wire, the shield pad having electrical insulation to shield said output wire from said ~~periodical~~ periodic signal, which is provided on said input wire, and the shield pad operating to supply said constant potential to said ~~shield substrate~~ frame to shield said output electrode and said output wire from said ~~periodical~~ periodic signal on said input electrode,

wherein said ~~shield substrate~~ frame, said input electrode, and said output electrode are coplanar.

33. (Previously Presented) The semiconductor device as claimed in claim 32, wherein said movable portion is electrically connected to a predetermined potential and comprises an electrode facing said output electrode to provide a capacitance providing said capacitive variation when said movable portion vibrates in said predetermined direction.

34. (Currently Amended) The semiconductor device as claimed in claim 32, said ~~shield substrate~~ frame ~~comprises a frame surrounding~~ surrounds at least said output electrode and input electrode and is arranged at least between said detection electrode and said drive electrode.

35. (Currently Amended) A semiconductor device comprising:

a circuit substrate and a semiconductor substrate fixed with respect to said circuit substrate, said semiconductor substrate including a fixed portion, a movable portion, and connecting members, ~~on~~ in a plane, said semiconductor substrate having gaps between said fixed portion and said movable portion, said connecting members elastically connecting said movable portion to said fixed portion across said gaps, said movable portion being movable in a predetermined direction with respect to said fixed portion, said fixed portion being electrically insulated from said movable portion and comprising:

an input electrode for inputting a ~~periodical~~ periodic signal from said circuit substrate to said movable portion to vibrate said movable portion;

an output electrode for outputting a signal indicative of first capacitive variation based on vibration of said movable portion in said predetermined direction with respect to said output electrode;

a monitor electrode for monitoring second capacitive variation based on vibration of said movable portion in said first predetermined direction and supplying a monitor signal to said circuit substrate;

and

a ~~shield substrate~~ frame arranged at peripheries of said movable portion, said input electrode, and said output electrode;

an input wire for connecting said input electrode to said circuit substrate to supply said ~~periodical~~ periodic signal to said input electrode;

an output wire for connecting said output electrode to said circuit substrate;

a monitor wire for connecting said monitor electrode to said circuit substrate;

a shield wire connected to a constant potential at said circuit substrate to provide capacitive shielding between said input wire and said output wire and between said input wire and said monitor wire; and

a shield pad connected to said shield wire on said fixed portion at a location between said input electrode and said output electrode, the shield pad operating to place said shield wire between said input wire and output wire to shield said output wire from said ~~periodical~~ periodic signal on said input wire, the shield pad being located ~~and~~ between said input wire and said monitor wire and having electrical insulation to shield said monitor wire from said ~~periodical~~ periodic signal, which is provided on said input wire, and the shield pad operating to supply said constant potential to said ~~shield substrate~~ frame to shield said monitor electrode and said output electrode from said ~~periodical~~ periodic signal on said input electrode,

wherein said ~~shield substrate~~ frame, said input electrode, and said output electrode are coplanar.

36. (Previously Presented) The semiconductor device as claimed in claim 35, wherein said movable portion is electrically connected to a predetermined potential and comprises a first electrode facing said output electrode to provide a first capacitance providing said first capacitive variation when said movable portion vibrates in said predetermined direction and a second electrode facing said monitor electrode to provide a second capacitance providing said second capacitance variation when said movable portion vibrates in said predetermined direction.

37. (Currently Amended) The semiconductor device as claimed in claim 35, said ~~shield substrate~~ frame ~~comprises a frame surrounding~~ surrounds said detection electrode and said drive electrode and is arranged, at least, between said monitor electrode and said input electrode and between said output electrode and said input electrode.

38. (Currently Amended) A semiconductor device comprising:

a circuit substrate and a semiconductor substrate fixed with respect to said circuit substrate, said semiconductor substrate including, ~~on~~ in a plane, a fixed portion and a movable portion, said fixed portion comprising a ~~shield substrate~~ frame and elastically supporting means connected to said ~~shield substrate~~ frame for supporting said movable portion to allow movement in a predetermined direction with respect to said fixed portion, said movable portion being electrically connected to a predetermined potential;

capacitive driving means for driving said movable portion, said capacitive driving means including a drive electrode supported by said ~~shield substrate~~ frame for receiving a drive signal from said circuit substrate to provide a drive force to said movable portion to vibrate said movable portion;

detection means for detecting capacitive variation based on vibration of said movable portion caused by supplying said drive signal to said drive electrode, said detection means including a detection electrode to supply a detection signal indicative of said capacitive variation to said circuit substrate, said ~~shield substrate~~ frame being arranged at peripheries of said detection electrode and said drive electrode;

a shield wire pad arranged between said drive electrode and said detection electrode which is adjacent to said drive electrode;

a drive signal wire for connecting said drive electrode to said circuit substrate to supply said drive signal to said drive signal electrode;

a detection wire for connecting said detection electrode to said circuit substrate; and

a shield wire connected to said shield wire pad and a constant potential at said circuit substrate, wherein said shield wire provides capacitive shielding between said drive signal wire and said detection wire to shield said detection wire from said drive signal on said drive signal wire and to supply said constant potential to said ~~shield substrate~~ frame to shield said detection electrode from said drive signal on said drive electrode,

wherein said ~~shield substrate~~ frame, said drive electrode, and said detection electrode are coplanar.

39. (Previously Presented) The semiconductor device as claimed in claim 38, wherein said movable portion is electrically connected to a predetermined potential and comprises an electrode facing said detection electrode to provide a capacitance providing said capacitive variation when said movable portion vibrates in said predetermined direction.

40. (Currently Amended) The semiconductor device as claimed in claim 38, wherein said ~~shield substrate~~ frame ~~comprises a shield frame surrounding~~ surrounds at least said detection electrode and said drive electrode and is arranged at least between said detection electrode and said drive electrode.

41. (New) The semiconductor device as claimed in claim 1, further comprising:

an input wire which connects said input electrode and said circuit substrate to supply the periodic signal to said input electrode;

an output wire which connects said output electrode and said external circuit to supply the vibration signal to said subtractor; and

a shield wire which is disposed between said input wire and said output wire and is set at a constant potential to provide capacitive shielding between said input wire and said output wire.

42. (New) The semiconductor device as claimed in claim 1, wherein the noise reducer has a subtractor which subtracts a value of the dummy signal generated in the dummy electrode from a value of the vibration signal outputted from the output electrode and outputs a difference signal indicating a difference between the vibration signal and the dummy signal.

43. (New) The semiconductor device as claimed in claim 7, further comprising:

a drive wire which connects said drive electrode and said circuit substrate to supply the periodic signal to said drive electrode;

a detection wire which connects said detection electrode and said external circuit to supply the detection signal to said subtractor;

a monitor wire which connects said monitor electrode and said external circuit to supply the monitor signal to said subtractor; and

a shield wire which is disposed between said drive wire and a group of said detection and monitor wires and is set at a constant potential to provide capacitive shielding between said drive wire and the group of said detection and monitor wires.

44. (New) The semiconductor device as claimed in claim 7, wherein the noise reducer has a subtractor which subtracts a value of the dummy signal generated in the dummy electrode from a value of the detection or monitor signal outputted from the detection or monitor electrode and outputs a difference signal indicating a difference between the detection or monitor signal and the dummy signal.